

Appl. No. 09/642,612
Amdt. dated October 26, 2004
Reply to Office Action of August 12, 2004

PATENT

REMARKS/ARGUMENTS

Claims 8-12, 14-20, 26-29, 35-39, and 41 are pending in the present patent application. Claims 8, 14, 17, 28, and 41 have been amended. No new matter has been added to the amended claims. Reconsideration of the claims is respectfully requested.

The Rejection of Claim 17

Claim 17 was rejected under 35 U.S.C. § 112, second paragraph. Claim 17 has been amended to address this rejection.

The Rejections of the Claims 14-17, 28 and 29

Claims 14-17, 28 and 29 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,734,654 to Shirai.

Claim 14 has been amended to recite "An apparatus for receiving a plurality of packets having the same contents sent from another apparatus through a plurality of physical lines that connect between said apparatus and said another apparatus" and "a plurality of line receivers receiving the plurality of packets having the same contents sent from said another apparatus through said plurality of physical lines".

Claim 28 has been amended to recite "a line transmitting unit that prepares a plurality of packets having an identical content, in association with a quantity of said plurality of physical lines, and transmits said plurality of packets having identical content to said plurality of physical lines" and "line receivers that receive a plurality of packets having identical content from the plurality of physical lines, and that deliver packets received from said plurality of physical lines to a protocol processor when said mode flags store a primary mode therein, said line receivers further operative to abandon received packets when said mode flags store a secondary mode therein."

Shirai discloses the frame relay switching apparatus and router that performs priority communication by which important data is not discarded by discarding a frame, when congestion is detected. Shirai does not disclose or suggest transmitting a plurality of packets

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having the same contents to a plurality of physical lines and receiving the plurality of packets having the same contents from the plurality of physical lines.

On the other hand, the present invention receives the packets of the same contents, although one side is deleted, but does not execute processing for discarding the required packet as in Shirai. For at least these reasons, it is respectfully submitted that claims 14-17, 28, and 29 are novel and nonobvious over the cited prior art.

The Rejection of Claim 41

Claim 41 was rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,222,841 to Taniguchi.

Claim 41 has been amended to recite "A receiving apparatus for receiving a plurality of packets having the same content from another apparatus through a plurality of physical lines, the packets received from one of the plurality of physical lines having identifier information unique to each packet" and "at least one line receiver receiving the plurality of packets having the same contents sent from said another apparatus through said plurality of physical lines".

Because the required network bandwidth cannot always be assured for transmitting an encoded stream such as an encoded video stream, the bit rate of the encoded stream is reduced in correspondence with the available network bandwidth upon transferring the stream. Taniguchi discloses a data transmission system that reduces the bit rate of the encoded stream in correspondence with the available network bandwidth upon transferring the stream. See Taniguchi col. 1, lines 25-30.

In Taniguchi, the encoded video data stream with reduced bit rates is transmitted from transmitting system 30 to receiving system 32 through the network 31 (Fig. 3). The transmitting system 30 executes processing for packetizing the video signal in the packet processing unit 42, and deletes the packet in correspondence with the available network bandwidth upon transferring the stream in the stream shaping processing unit 12, and transmits the packets to the receiving system 32 (see col. 10, lines 1+). The receiving system 32 executes

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decode processing of the packets which are received, and does not execute delete processing of the packets.

In Taniguchi, the network 31 is a single line, does not have a plurality of physical lines, and does not transmit packets having the same content. The identifier pointed out in the office action is not an identifier that is unique to each packet. See Taniguchi col. 10, lines 32-41. The packet type identifier indicates a packet type such as video, audio, or the like. Referring to Fig. 11, the identifier "000000000" indicates the audio packet, the identifier "001100001" indicates the video's system signal packet, and the identifier "001100111" indicates the video's I-picture signal packet, respectively.

If the packet of the same type is transmitted as shown in Fig. 15, even if data in the packet differs, the packets with the same identifier are transmitted continuously. Thus, the identifier disclosed by Taniguchi indicates the type of packet, but does not indicate an identifier unique to each packet.

Therefore, Taniguchi does not disclose or suggest the following features of claim 41 "when the received packets are confirmed, confirming whether the identifier information of the received packets are stored in the packet information storage, and when the identifier information having the same contents as those of the received packets are not stored therein, allowing said packet information storage to store the identifier information of the received packets therein." For at least reasons, it is respectfully submitted that claim 41 is novel and nonobvious over Taniguchi.

The Rejections of Claims 18-20

Claims 18-20 were rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent 5,734,654 to Shirai in view of U.S. Patent 6,757,297 to Chin.

However, the office action then discusses the Taniguchi patent in detail. We do not understand if the office action meant to reject the claims over the Shirai reference or the Taniguchi reference.

As mentioned above, Shirai does not disclose or suggest transmitting a plurality of packets having the same contents to a plurality of physical lines and receiving the plurality of

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packets having the same contents from the plurality of physical lines. Taniguchi does not disclose or suggest these features either. Therefore, claims 18-20 are also patentable over the cited references.

The Rejections of Claim 8-12, 26, 27, and 35-39

Claims 8-12, 26, 27, and 35-39 were rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent 6,222,841 to Taniguchi in view of U.S. Patent 5,734,654 to Shirai.

Claim 8 has been amended to recite "An apparatus for receiving a plurality of packets having the same contents sent from another apparatus through a plurality of physical lines that connect between said apparatus and said another apparatus, the packets received from one of said plurality of physical lines having identifier information unique to each packet" and "a line receiver unit, connected by said plurality of physical lines, receiving the plurality of packets having the same contents sent from said another apparatus through said plurality of physical lines".

Claim 26, which has not been amended, recites "a line transmitting unit that prepares packets with identifier information added thereto, said identifier information unique to each of the packets, said packets prepared in association with a number of said plurality of physical lines; said line transmitting unit operative to transmit packets having the same contents to said plurality of physical lines" and "at least one line receiver that monitors received packets; and responsive to a received packet, confirms whether identifier information of a received packet has been stored in said packet information storage; and when identifier information having the same contents as that of said received packets has not been stored therein, allowing said packet information storage to store said identifier information of said received packets therein."

As mentioned above, Shirai does not disclose or suggest transmitting a plurality of packets having the same contents to a plurality of physical lines and receiving the plurality of packets having the same contents from the plurality of physical lines. Taniguchi does not disclose or suggest these features either. Therefore, claims 8-12, 26-27, and 35-39 are also patentable over the cited references.

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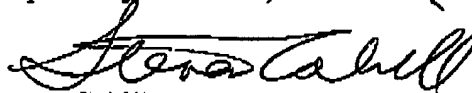
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CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



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